MARSHALL STAR

Marshall Space Flight Center

April 13, 2000

"We bring people to space — We bring space to people"

Inside the Star

Great Moonbuggy Race, page 5





NASA Goes to the Stars, page 8

FIRST Robotics Competition, page 9





Earth to Orbit Challenge, page 10

Full-scope ISO registration, VPP certification delayed

by Art Stephenson

The combination of increased work at the Center and the loss of 145 civil servants in January has placed excessive strain on our workforce.

I have heard this message from our management team and from numerous employees. We are eager to see new hires arrive who will help address this issue.

To alleviate this situation now, I have chosen to delay both our Voluntary Protection Program (VPP) certification and our full-scope ISO registration dates.

The new dates will be selected after we see a turnaround in stress levels.

The decision in no way takes away from the importance of safety or our desire to better establish, monitor and improve our business practices.

I ask each employee to continue to place priority on safety and fully support our Marshall Safety & Health 2000 training.

This decision is based on our commitment to support our values of Excellence

and People.

Pressing ahead with these efforts in the current situation could degrade project and program performance while overstressing our work force.

I appreciate the honest feedback provided to me by my staff and employees at the first of what I hope will be many,

Director's Corner

skip-level luncheon meetings. These skiplevel luncheons are composed of approximately 15 randomly selected employees from across the Center.

Again let me emphasize the importance of safety and ISO. This action is a direct result of a concern for the safety of our work force and the safety of our high value assets.

We will continue to audit our current inscope ISO processes with the same rigor

See Director's Corner on page 2

Rocket science, astronauts, rides highlight Marshall's Open House May 20

by Sherrie Super

It's not every day the public can step into the world of rocket scientists, meet an astronaut or take a skydive simulation ride. Yet these are just a few of the free, out-of-this-world experiences on tap Saturday, May 20, when the Marshall Center opens its doors from 9 a.m. to 6 p.m.

In conjunction with the Open House, hundreds of aerospace and transportation officials, engineers and scientists are slated to gather in Huntsville May 18-19 for NASA's second "Turning Goals Into Reality" conference, also hosted by the Marshall Center.

Open House visitors will get a close-up look behind the scenes of the Marshall Center's high-tech research and develop-

See Open House on page 6

Open House, picnic: one great celebration

In 1997 and 1998, the Marshall Center held open houses for the Marshall team, retirees and the public. Every year the Center also holds an annual picnic for the Marshall team and retirees. This year, instead of two big events, there will be one great celebration on May 20, said Marshall Center Director Art Stephenson.

"This year we're inviting the entire Marshall team and retirees to the May 20 celebration," Stephenson said. "The picnics we've held in the past and the upcoming Open House share many of the same features.

"There will be lots of activities for children, and food and refreshments will be available for purchase on site. In the future, we will hold the picnic in its traditional format during those years that we don't offer an open house."

NASA selects commercial, government inventions of year

It won't be long before such diverse products as lipstick, art and circuit boards could benefit from a thermoplastic developed for use in space.

Because of thermoplastic's commercial potential, NASA has named the high-tech material its 1999 Commercial Invention of the Year. A research team from NASA's Langley Research Center in Hampton, Va., developed the winning invention.

The material offers protection from ultraviolet radiation as a coating for art and outdoor statues. It promises UV protection as an additive to cosmetics and exterior paints. It offers temperature-resistance when used in the form of solid components in electronic devices like liquid crystal displays and in flexible,

printed circuit boards.

Inventors Anne St. Clair, Terry St. Clair and Bill Winfree have been awarded four U.S. patents on the material, which they call Colorless and Low Dielectric Polyimide Thin Film Technology. R&D Magazine also selected the invention as one of the top 100 R&D products for 1999.

The technology has been licensed to SRS Technologies in Huntsville and Triton Systems Inc., in Chelmsford, Mass.

Douglas B. Leviton, of the Applied Engineering and Technology Directorate at Goddard Space Flight Center in Greenbelt, Md., has been named NASA Government Inventor of the Year for 1999. Leviton invented the Ultra-High Sensitivity, Incremental and Absolute Optical Encoder.

These new metrological encoders have enabled several space instruments to be characterized more accurately and precisely than otherwise possible, in less time and at far lower cost.

The device has many commercial applications, including robotics, inspection equipment, coordinate-measuring equipment, profilometers, air-bearing spindles and surveying equipment.

The encoder's innovative design offers a number of advantages, including increased reliability, compact form and higher sensitivity over what is commercially available.

Director's Corner—

Continued from page 1

and expect our work force to follow the procedures we have in place.

An assessment of full-scope readiness may be performed as a part of the scheduled internal audits for our current inscope ISO processes when requested by the organization being audited.

Assessment findings will be included in the report but will not require a formal corrective action response.

New procedures developed in support of full-scope ISO registration I believe should be followed as soon as adopted by the organization but without formal audits on them.

We are simply going to hold off on completion of new procedures and a full-scope audit for registration.

The VPP team will continue to meet to help us address safety issues across the Center, but the push for certification has been removed.

I would remind everyone that the certification is not the reason we took on VPP. We must continue to implement the processes associated with the safety program enhancements.

As I have stated many times, we are pursuing VPP for the safety benefits it brings to us — not to impress anyone with the certification itself.

In the same way, full-scope ISO registration is for our benefit and is not being done to satisfy any outside pressure.

I appreciate your cooperation and support in this time of challenges.

"Safety is no Accident"

— Safety slogan submitted by Brice Marsh, CSC

New, improved Shuttle Atlantis set to launch to Space Station April 24

Pollowing a review of flight readiness,
Space Shuttle managers confirmed April 24 as the launch date for Atlantis on a mission that will continue the development of the orbiting International Space Station and usher in a new era of Shuttle improvements.

Atlantis' liftoff is planned for approximately 4:15 p.m. EDT, within a 10-minute launch window. The precise launch time and window could vary slightly and will be established about 24 hours ahead of liftoff to optimize the Shuttle's performance.

"Atlantis' last flight in space was a visit to the Mir space station," Space Shuttle Program Manager Ron Dittemore said. "Since then, Atlantis has had more than 100 modifications and improvements made, making it the most up-to-date Shuttle ever."

In recognition of Easter weekend, provisions will be made for launch team personnel to honor family and personal obligations.

Atlantis' mission on STS-101 will be the first flight of a new Shuttle "glass cockpit" and more than a dozen other Shuttle improvements.

Atlantis will dock with the International Space Station and the seven-member crew will unload more than a ton of cargo, performing several maintenance tasks onboard to ensure the station remains in good condition as its orbital assembly continues later this year.

The crew also will conduct one spacewalk to perform work on the exterior of the station.

Atlantis is planned to spend almost six days docked with the station before returning to Earth with a landing planned at Kennedy Space Center at 11:23 a.m. EDT May 4.

Look! The Easter Bunny!

Rita Mason, in background, of Marshall's Procurement Office, escorts her daughter, Jasmine Mitchell, right, and co-worker Kathy Rice's daughter, Alia Krir, to see the Easter Bunny at the annual Easter Egg Hunt last Sunday at the Marshall Picnic Area.



Photo by Danny Reeves, NASA/Marshall Space Flight Center

★ ★ ★ Marshall Stars ★ ★ ★

Stellar Awards — NASA's Chandra X-ray Observatory Team and Dr. Martin Weisskopf, chief scientist for the Chandra project, received Stellar Awards for their work on the Marshall-managed Chandra Observatory.

The Rotary National Award for Space Achievement Foundation presented the awards March 10 at the 14th annual Space Trophy Dinner in Houston.

The Chandra team — engineers from the Marshall Center and TRW Inc. of Redondo Beach, Calif. — was recognized for designing, building, launching and deploying Chandra.

Weisskopf was presented with an individual Stellar Award for his outstanding scientific leadership and technical insight in the development, calibration and operation that helped guide the successful Chandra science mission.

Craig Staresinich, TRW's Chandra program manager, accepted the award on behalf of the team. NASA astronauts Dr. Michael Foale and Col. Eileen Collins presented the awards. Collins commanded the STS-93 Space Shuttle mission that launched and deployed Chandra in July 1999.

The Stellar Awards are presented annually to individuals and teams who make significant scientific or engineering contributions to the nation's space program.

Space Technology Hall of Fame — Marshall's Helen Stinson of the Technology Transfer Department was inducted into the 2000 Space Technology Hall of Fame at the 16th Annual Space Symposium April 6 in Colorado Springs, Colo. Stinson is program manager for the Small Business Innovation Research Program (SBIR).

Also receiving the award were Dr. Harry Whelan, pediatric neurologist with the Children's Hospital of Wiscon-

sin in Milwaukee, and professor of neurology at the Medical College of Milwaukee; and Ron Ignatius, president of Quantum Devices Inc. of Barneveld, Wis., for work in developing lightemitting diode (LED) technology for use in medical procedures.

The LED research was funded by a SBIR contract through the Technology Transfer Department and Quantum Devices. Using technology derived from Space Shuttle plant growth experiments, the procedure uses pinhead-sized LEDs to illuminate drugs used in a variety of medical procedures. LED destroys brain cancer by activating photosensitizers, or light-sensitive, tumor-fighting drugs injected into the area. Unlike other procedures, LED destroys cancerous cells, leaving surrounding tissue virtually untouched.

Induction into the Technology Hall of Fame is among the nation's highest awards in technology, normally reserved for those technologies several decades old and well-commercialized. Marshall's Technology Transfer Department and Quantum Devices began the project five years ago through a Phase I SBIR agreement. A second SBIR agreement in 1998 provided for study of wound healing utilizing LED technology.

Work between the Marshall Center and Quantum Devices continues today with Quantum and Marshall's Engineering Directorate developing new applications for the LED in wound healing — technology that may be used in long-term space flight, military situations and civilian medical care.

Marshall Center employees featured in "Marshall Stars" have made significant contributions to NASA and the Marshall Center by taking significant strides in leadership and dedication to their professional and/or educational development. Marshall Center employees may nominate themselves or another employee. Submit your nominations for consideration to Debra Valine, CD40, or call 544-3749.

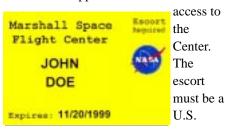
New color-coded visitor badges show restricted access

Beginning April 17, Marshall's Protective Services Department will issue distinctive green and yellow badges to designate individuals who are restricted from access to export controlled technology and/or must be escorted while on Center.

"The new green badge will identify those individuals who do not meet federal directives for access to export controlled technology," said Bradley Waits, manager of the Protective Services Department. "The new yellow badge will make it easier to identify visitors who must be escorted."

This is one of several actions the Center has implemented to provide increased protection of our critical technology. Recent incidents at other government agencies have emphasized the need to protect our critical technology from foreign exploitation.

Distinctive yellow badges with the words "Escort Required" in the upper right corner will be issued to visitors who are not approved for unescorted



citizen and either a NASA civil service employee or a picture-badged Marshall contractor.

If a large "A" appears in the lower right



corner of the badge, the wearer is an immigrant alien or foreign representa-

tive and is restricted from access to export controlled technology. If no "A" appears on the badge, the wearer is a permanent resident alien and is authorized access to export controlled technology, if he/she has the proper need to know.

Employees who see someone wearing the yellow Escort Required badge who is not being escorted are encouraged to assist the person in finding their escort, and should contact Security at 544-HELP (4357) OPTION 1.

Distinctive green badges will be issued to those individuals who are approved for

unescorted access to the Center but are restricted from access to



export controlled technology.

If the individual is a short-term visitor, the word "Visitor" will appear in the upper right corner of the badge. If the individual is a long-term visitor, for example a contractor employee, his or her picture will appear in the upper right corner of the badge.

For both shortand longterm visitors a large "A" will appear in the



lower right corner of the badge. The "A" on the badge designates that the individual is an immigrant alien or foreign representative, and is restricted from access to export controlled technology.

Permanent resident aliens who have been approved for non-escort will be issued regular visitor badges. If a person has an "A" on the badge; then they are subject to export control, regardless of the color of the badge.

Employees are encouraged to become familiar with the new badges and to wear badges at all times. If you have questions concerning access to the Center by non-U.S. citizens, please call Protective Services at 544-4535.



Photo by Emmett Given, NASA/Marshall Space Flight Center

Endorsing VPP

Members of the North Alabama Brotherhood of Organized Labor sign a Voluntary Protection Program (VPP) proclamation. Marshall representatives, seated from left, are Amanda Goodson, director of Marshall's Safety and Mission Assurance Office, and Sheila Cloud, director of the Center Operations Directorate.

Great Moonbuggy Race

Pittsburg High School, Kan., College of N.J. win

by George Hayward

Pittsburg High School from Pittsburg, Kan., won top honors in the high school division of NASA's 7th annual Great Moonbuggy Race Friday at the U.S. Space & Rocket Center. The College of New Jersey in Ewing finished first in college competition Saturday.

The Marshall Center, the U.S. Space & Rocket Center and the American Institute of Aeronautics and Astronautics sponsor the event.

The Pittsburg team bested more than a dozen other high schools to earn a weekend trip to Space Camp at the Space & Rocket Center.

New Century Technology High School from Huntsville finished second, while Carthage High School of Carthage, Mo., placed third. Those teams received plaques, and all three winning teams received fleece jackets bearing the Great Moonbuggy Race logo. The award for best moonbuggy design went to the Orleans Parish Area Schools team from New Orleans.

Competing high school teams also included Autauga County Technology Center in Prattville, Ala.; Eastlake High School in Chula Vista, Calif.; Graff Career Center in Springfield, Mo.; Lake Monroe Christian Academy in Sanford, Fla.; Monterey (La.) High School; UniTec Career Center in Farmington, Mo.; and

W.T. Clarke High School in Westbury, N.Y.

In the college division on Saturday, the New Jersey team beat colleges and universities from 17 states and Puerto Rico to earn a trip to Kennedy Space Center, Fla., to view a Space Shuttle launch.

Ozarks Technical
Community College from
Springfield, Mo., finished
second, while the University
of California at Santa
Barbara placed third. Those
teams received plaques and
all three winning teams
received fleece jackets
bearing the Great
Moonbuggy Race logo. The
award for best moonbuggy
design went to South
Dakota State University in
Brooking.

Competing colleges also division Sincluded Arizona State
University in Tempe; Cornell University

in Ithaca, N.Y.; Embry-Riddle Aeronautical University in Daytona Beach, Fla.; North Dakota State University in Fargo; Pittsburg State University in Kansas; Purdue University in Indianapolis; Rochester Institute of Technology in New

> York: South Carolina State University in Orangeburg; Southern Illinois University in Carbondale; Southwest Missouri State University in Springfield; Tennessee Technological University in Cookeville; University of Evansville in Indiana; University



Photos by Doug Stoffer, NASA/Marshall Space Flight Center

The College of New Jersey in Ewing won the college division Saturday.

of New Hampshire in Durham; University of New Orleans; University of Puerto Rico in Humacao; University of South Alabama in Mobile; University of Tennessee in Knoxville; University of Vermont in Burlington; and Vanderbilt University in Nashville, Tenn.

The competition is inspired by the actual lunar roving vehicle project, which was successfully accomplished by the Marshall Center in the 1960s and 1970s. The race challenges students to design and build a human-powered vehicle so they will learn how to deal with real-world engineering problems — similar to those faced by the original Marshall Center moonbuggy team.

During the race, vehicles powered by two team members, one male and one female, race one at a time over a half-mile obstacle course of simulated moonscape terrain.

The writer, employed by ASRI, supports the Media Relations Department.



Pittsburg High School, Kan., had the fastest time in the high school division on Friday.

Open House

Continued from page 1 ment complex.

At NASA's premier center for space transportation and propulsion systems, they'll see it does take a rocket scientist to make possible the wonders of America's space program, such as the Marshall-managed X-vehicle demonstrators aimed at making space travel more reliable and affordable.

Another such wonder — a mammoth Saturn V rocket capable of launching humans to the Moon — was conceived at Marshall. Miniature versions of that rocket, the Mercury-Redstone, the Space Shuttle and others will be featured in a special show on the history of rocketry.

With flashes of fire and billowing smoke, each miniature — measuring several feet in length —will be launched toward the heavens by the Huntsville Area Rocketry Association. The rockets will soar several hundred feet over the Marshall Center, deploy their parachutes and a "recovery team" will make the retrievals.

Open House visitors also will hear the powerful rumble and see billows of exhaust plume when witnessing live test firings at the Hot Gas Facility. The facility has tested materials used on NASA's most advanced space vehicles, including the Space Shuttle.

NASA astronauts will be on-hand to

How to get there

n May 20, visitors may enter Redstone Arsenal for the Marshall Open House through Gate 9 at the Rideout Road exit of Interstate 565; Gate 8, at Drake Avenue and Jordan Lane or Gate 7 at Zierdt Road near the Huntsville International Airport.

More information and directions can be obtained 24 hours a day by calling (888) 901-NASA or by visiting the Open House Web site at:

http://openhouse.msfc.nasa.gov

mingle with the public, sign autographs and even provide musical entertainment. "Max Q" — an all-astronaut rock-n-roll band — is among musical groups scheduled to perform at the Open House.

Also on the entertainment roster are dance exhibitions, local radio personalities, Sparkles the Clown and Officer McGruff, the crime dog.



A crowd reacts to a miniature rocket launch at the 1998 Open House at Marshall. At Open House 2000 on May 20, miniature versions of NASA rockets, launched by the Huntsville Area Rocketry Association, will soar several hundred feet, deploy their parachutes and a "recovery team" will make the retrievals.

For a musical glimpse at the Rocket City's role in America's space program, visitors can enjoy a sneak preview of performances from "Moon Dreams," a Broadway-style musical set to debut this summer in Huntsville.

To learn more about Marshall's history, visitors can stroll through the Marshall Heritage Gallery to view space-related artwork, models of NASA space vehicles and historical memorabilia about Dr. Wernher von Braun, the rocket pioneer who became Marshall's first director in 1960.

For children, miniature pedal-planes can be booked for a "flight." Climbing into realistic airplane simulators, pedaling down a colorful runway and taxiing into a controlled airspace, young people will experience the exhilaration of flight.

For those seeking the thrill of skydiving, the X-TremeTMAir simulator will send them in a "free fall." In an enclosed "flying" area, participants will have the sensation of free fall at 120 mph — without jumping from a plane.

Another attraction, the MorphisTM MovieRide Theater simulator, will let visitors "journey" to Mars, shoot down a ski slope, take the driver's seat in a careening race car or fly with the Navy's Blue Angels aerial performance team.

Those who yearn to picture themselves as an astronaut can stick their heads in life-

size cutouts of astronaut suits and a Space Shuttle cockpit for a souvenir photo. NASAT-shirts and caps and other souvenirs will be available for purchase.

Visitors may purchase food and refreshments on site.

Maps of the Marshall Center, including locations of event facilities and activities, will be distributed to visitors as they enter the arsenal. Every tour stop is accessible to the handicapped.

Marshall's last open house in 1998 was attended by more than 26,000 people.

The writer, employed by ASRI, supports the Media Relations Department.

Obituaries

Simms, George Melvin, 70, of Brownsboro, Ala., died March 14. He retired from Marshall in 1985 where he worked as an electronics technician. He is survived by his wife, Barbara Simms, who retired from Marshall in 1995, and two daughters: Deborah Bowerman, who works in Marshall's Information Systems Department, and Belinda Burch of Moulton, Ala.

Rodman, Richard D., 65, of Boaz, Ala., died March 23. He retired from Marshall in 1994 where he worked as a program analyst. He is survived by his wife, Martha S. Rodman. Torkar, Joseph E., 74, of Huntsville, died March 23. He retired from Marshall in 1990 where he worked as a program analyst. Cloud, James W., 79, of Huntsville, died March 28. He retired from Marshall in 1978 where he worked as a budget analyst. He is survived by his wife, Billie H. Cloud.

Hatch Act governs federal employees' political activity

As the political campaigns of 2000 get under way, federal employees are reminded that the Hatch Act restricts the political activity of executive branch employees of the federal government.

Following is a list of Hatch Act do's and don'ts, as well as a list of frequently asked questions and answers for federal employees who may engage in partisan political activity.

The Office of Special Council issues advisory opinions to persons seeking advice about political activity under the Hatch Act. You may request such advice by phone, fax, mail or e-mail as follows:

Hatch Act Unit U.S. Office of Special Counsel 1730 M Street, NW, Suite 300 Washington, D.C. 20036-4505

Tel: (800) 85-HATCH or (800) 854-2824

(202) 653-7143 Fax: (202) 653-5161 E-mail: hatchact@osc.gov

The information at right applies to nonsenior executive service federal employees. Greater restrictions apply to these employees.

For more information on questions regarding the Hatch Act check out the Office of Special Council Web site at:

www.osc.gov

or contact the Marshall Office of Chief Counsel at 544-0011.

Guidelines for engaging in partisan political activity DO's

Federal employees may —

- Be candidates for public office in nonpartisan elections
- Register and vote as they choose
- Assist in voter registration drives
- Express opinions about candidates and issues
- Contribute money to political organizations
- Attend political fund-raising functions
- Attend and be active at political rallies and meetings
- Join and be an active member of a political party or club
- Sign nominating petitions
- Campaign for or against referendum questions, constitutional amendments, municipal ordinances
- Campaign for or against candidates in partisan elections
- Make campaign speeches for candidates in partisan elections
- Distribute campaign literature in partisan elections
- Hold office in political clubs or parties

DON'Ts

Federal employees may not —

- Use official authority or influence to interfere with an election
- Solicit or discourage political activity of anyone with business before their agency
- Solicit or receive political contributions (may be done in certain limited situations by federal labor or other employee organizations)
- Be candidates for public office in partisan elections
- · Wear partisan political buttons on duty
- Engage in political activity while:
 - on duty
 - in a government office
 - wearing an official badge, uniform or other insignia that identifies the agency
 - using a government vehicle

Frequently asked questions and answers for employees who may engage in political activity

B elow are answers to some of the most frequently asked questions received by the Office of Special Council about political activity by federal employees.

Q: Can I make a contribution to the campaign of a partisan candidate, or to a political party or organization?

A: Yes. A federal employee may contribute to the campaign of a partisan candidate, or to a political party or organization.

Q: If I have a bumper sticker on my personal car, am I allowed to park the car in a government lot or garage, or in a private lot/garage if the government subsidizes my parking fees?

A: Yes. An employee is allowed to park his or her privately owned vehicle with bumper sticker in a government lot or

garage. An employee may also park the car with a bumper sticker in a private lot or garage for which the employee receives a subsidy from his or her agency.

Q: Can I help organize a political fund-raiser?

A: An employee is allowed to organize a fund-raiser, including supplying names for the invitation list, as long as he or she does not personally solicit, accept or receive contributions.

Q: Can my name appear on invitations to a political fundraiser as a sponsor or point of contact?

A: No. An employee's name may not be shown on an invitation to such a fund-raiser as a sponsor or point of contact.

See Questions on page 11

6,800 attend

Marshall fans cheer Stars in season opener

Parenty 6,800 baseball fans watched as the Huntsville Stars came from behind to beat the Chattanooga Lookouts 9-7 in the baseball season opener April 6. Stars' first baseman Bucky Jacobson hit a two-run home run to tie the game in the seventh inning. The Stars went on to score two additional runs to win the game. NASA's Marshall Exchange treated employees, retirees, contractors and families to game tickets. Marshall Center Director Art Stephenson threw out the first pitch to start the game.



Photos by Dennis Olive, NASA/Marshall Space Flight Center

Anita Draper, of Marshall's Accounting Operations Office, sings the "Star Spangled Banner" to open the ball game.



Center Director Art Stephenson, center, is handed the ceremonial "first pitch" ball by Huntsville Stars' catcher Brian Moon.



Marshall employee Alan Murphy of the Space Transportation Directorate and his son Nate enjoy watching the first game of the Stars' 2000 season.



The Marshall Exchange provided free tickets to the game to Marshall employees, retirees, contractors, families and friends.



Volunteer Danny Hightower, left, manager of Marshall's Human Resources Department, gives Dom Amatore, manager of the Media Relations Department, one of 2,000 NASA posters distributed to attendees.



Marshall volunteers carry the Open House banner onto the field before the game.

NASA-sponsored students compete in robot games

Two San Francisco Bay Area student robot teams joined with a New Jersey team to win the FIRST national robotic games championship April 8 at Walt Disney World's EPCOT Center in Orlando, Fla., in a competition among 268 robots from high schools across the nation.

The Marshall Center's Education Programs Department sponsored a team from Lee High School in Huntsville for the event. The Lee/Marshall team "X-Traktor" received the "Judge's Award for Getting it Right" and the trophy for highest score for a single match.

At the regional competition March 16-18 in Houston, the Lee High/Marshall Robotics team was ranked No. 12 of 35 teams. The team also received the Judges' Award for the design of their robot and for the journal the students created.

Student-made robots formed "alliances" to lift large balls and put them into a container during the competition, the ninth annual event of its kind. The winning teams from Foothill High School in San José, Calif., and Vintage High School in Napa, Calif., both sponsored by NASA's Ames Research Center, located in California's Silicon Valley, joined with North Brunswick Township High School in North Brunswick, N.J., to win FIRST's annual contest.

NASA worked cooperatively with a non-profit group, "For Inspiration and Recognition of Science and Technology," (FIRST), of Manchester, N.H., which organizes the contests.

The goal of the robot games is to allow students to interact with engineers so that youths can see the connection between classroom instruction and the real world. Each year FIRST develops the competition and supplies "a problem" and a kit of parts to teams of students.

For more information about the robotics games, visit the Web at:

http://robotics.nasa.gov/first.html and http://www.usfirst.org



Courtesy photo

NASA Administrator Dan Goldin checks out "X-Traktor," the Lee High School/Marshall Center entry in the FIRST Robotics competition in Orlando.

Upcoming Events

Mars Orbital Review — A program and project management forum will be from noon-2 p.m. Monday in Morris Auditorium. Center Director Art Stephenson will discuss the report of the Mars Climate Orbiter Investigation Team and the implications for program and project managers.

Avionics Open House — Marshall's Avionics Department is hosting an open house from noon-4 p.m. April 20. The event starts in the main lobby on the south side of Bldg. 4487. Reserved visitor parking will be provided in the south parking lot, across from the main lobby of Bldg. 4487. New and innovative as well as historic avionics capabilities, products and facilities will be featured in Bldgs. 4487, 4190 and 4194 (by bus only), 4436, 4475, 4476, 4619, 4656 and 4663.

Earth Day — A tree planting ceremony to celebrate Earth Day will be from 10-11 a.m. April 20 on the west side of Bldg. 4493, the Microgravity Development Laboratory. Fifteen employees will receive gift certificates from "Wild Birds Unlimited" for being nominated in Marshall's "Spot an Environmentalist" contest. The winners are: Arthur Patrick, AD10; Lynn Stone, EG&G; Stephen P. Tucker, TD52; Eric Taylor, TD62; Jeanette Tokaz, Sverdrup; Ted Ellett, Cortez III; John Troy, EG&G; Lisa Watson, FD43; Walt Schneider, Sverdrup; Ralph Allen, AD22; Farley Davis, AD10; David Thaxton, AD02; and David C. Glover, EG&G.

Amnesty Day — Employees may turn in hazardous chemicals from 9 a.m.-2 p.m. Tuesday, Amnesty Day, at the south of Bldg. 4705. Chemicals should be turned in if the shelf life has expired, the chemical is no longer needed or if the chemical is unclaimed. Items that cannot be turned in include: damaged, corroded or leaking containers; radioactive materials; explosives; medical wastes or materials; or household or personal wastes. For more information, call John Troy at 544-4787.

Fireside Chat — The Marshall Retirees' Association will host the third in a series of talks recalling Huntsville's role in defense and space at 7 p.m. April 27 at the University of Alabama in Huntsville's Student Union Building. The event is free and open to the public. The April presentation is entitled, "The Lunar Program – 1960-1970." All participants served in positions at Marshall during this timeframe. Woody Bethay, associate director, will moderate the panel. Panelists include Bonnie Holmes, who served as secretary to von Braun; retired U.S. Army Col. Lee James, Saturn V program manager; Bob Lindstrom, manager of the Shuttle program; Dr. William R. Lucas, Marshall director; Leland Belew, Saturn engines and

See Upcoming Events on page 11

'Earth to Orbit'

Program presents engineering challenges to students

More than 40 students from five states participated in NASA's Earth to Orbit Engineering Design Challenge last Friday.

The NASA-sponsored program gives students in their classrooms a feel for the challenges faced by NASA engineers designing the next generation of space vehicles.

And it helps students in the program's targeted grades six through nine achieve national goals for developing science, math and thinking skills.



A student explains her team's challenge to Reginald Alexander from Marshall's Space Transportation Directorate.



Dr. Harold McWilliams, right, demonstrates the second challenge on spacecraft structures. McWilliams in a curriculum developer of the Earth to Orbit Engineering Design challenges with TERC of Cambridge, Mass.



Photos by Terry Leibold, NASA/Marshall Space Flight Center

Mark Fisher, right, of Marshall's Space Transportation Directorate, gives tips to field test students from Manchester, Tenn., on their thermal protection system model.



An Earth to Orbit student from California checks the display of his classmates' project.



Barbara Anthony, center, an educator resource specialist, with Ai Signal Research Inc., looks on as a student explains why his team's thermal protection system lasted so long.



Curriculum developer Paul Wagoner, right, of TERC, demonstrates the new design challenge, electromagnetic propulsion.

Upcoming Events

Continued from page 9

Skylab manager; and Konrad Dannenberg, an engineer for the Saturn systems.

Community Leaders' Breakfast —

Marshall's annual community leaders' breakfast will be at 7:30 a.m. April 20 in the Bldg. 4203 cafeteria. Those invited include the board of directors of the Huntsville/Madison County Chamber of Commerce, Madison City Chamber of Commerce, North Alabama African-American Chamber of Commerce, Gadsden Chamber of Commerce, Athens/Limestone County Chamber of Commerce, Decatur-Morgan County Chamber of Commerce, Alabama Commission on

Aerospace Science and Industry, and local elected officials. To attend, go to "Inside Marshall" and sign up by Thursday.

Environmental Training — A

fundamentals of contamination control and space environment course will be held from 8 a.m.-4:30 p.m. April 24-28 in Bldg. 4200, room G13/2. Limited spaces are available on a first-come, first-serve basis. Interested employees should submit a Form 59 to Sherry McKellar, CD20. For more information, call Ela Washington at 544-1164 or McKellar at 961-0012.

Project Management Conference

— A project management shared experiences conference will be held May 7-11 at

The Sheraton Oceanfront Hotel in Virginia Beach, Va. The conference provides a forum to understand key initiatives influencing NASA project management and for project people to share knowledge, experiences and creative approaches to project management. For more information, call Renee Higgins at 544,8864

Recycling Fact: Flattened aluminum beverage cans go to Atlanta, Ga., where an Alcoa Aluminum processing facility shreds the cans. The shredded cans move to Knoxville, Tenn., where they are melted in a

furnace and rolled in sheets to make more

aluminum beverage cans.
Visit Marshall's recycling Web site at: http://www.recycle.msfc.nasa.gov/

Questions

Continued from page 7

Q: Can I speak at a political fund-raiser?

A: An employee is allowed to give a speech or keynote address at a political fund-raiser, as long as he or she is not on duty, and does not solicit political contributions.

Q: If I'm going to speak at a political fund-raiser, what information about me can be printed on the invitations?

A: An employee's name can be shown as a guest speaker. However, the reference should not in any way suggest that the employee solicits or encourages contributions. Invitations to the fund-raiser may not include the employee's official title; although an employee who is ordinarily addressed with a general term of address such as "The Honorable" may use, or permit the use of, that term of address on the invitation.

Q: Can I attend a state or national party convention? If so, in what capacity?

A: Yes. A federal employee may serve as a delegate, alternate or proxy to a state or national party convention.

Q: If I run as a candidate for public office in a nonpartisan election, does the Hatch Act allow me to ask for and accept political contributions?

A: An employee who is a candidate for public office in a nonpartisan election is not barred by the Hatch Act from soliciting, accepting or receiving political contributions for his or her own campaign.

Q: May I distribute brochures for a political party to people arriving at a polling place on Election Day?

A: Yes. An employee may stand outside a polling place on Election Day and hand out brochures on behalf of a partisan political candidate or political party.

Sports

Health & Fitness Expo — The 3RD Annual Health & Fitness Expo will be from 10 a.m.-2 p.m. April 19 at the NASA Exchange Bldg. 4752. A variety vendors and exhibitors will display medical and health fitness services and products attendees can try. The annual fitness walk begins at 11 a.m. All directorates are encouraged to participate in the inter-directorate competition. A special trophy will be awarded to the directorate with the most participants in the walk. Come browse through the vast array of medical and health fitness information. Door prizes will be awarded. Bring your walking shoes and "let's make Marshall a healthier workplace."

Rocket City Rowing Club — The spring adult rowing clinic for beginners will be from 5:30-7 p.m. April 25, May 2, 9, 16, 23 and 30. Learn basic rowing technique, along with equipment and basic lingo. Cost for the clinic is \$90. For more information, call Halley Little at 539-8841.

MARS Tennis Results — Ten teams participated in the Open Doubles Tennis Tournament held April 1. Results are: First place — Joe Cremin and Larry Newman; second place — Bob Wolf and Maurice Wolf; third place — Margaret Craig and Joanie Bell; and fourth place — Phil Hays and Barry Dawson. The next tournament is the Henry Rupp Closed Hi-Lo on May 6.

MARS Golf — A two-person best score golf tournament will be held at 9 a.m. May 6 at Guntersville State Park. Deadline for registration is April 28. The Mars Golf Club is open to all NASA employees, onsite contractor personnel and NASA retirees. For more information or to enter a tournament, call Lee Foster at 544-1589, Joey Butler at 544-3808 or Robert Rutherford at 544-8117. Entry fees are \$5.

Employee Ads

Miscellaneous

- ★ Energy efficient hot water heat pump, E-Tech, uses existing hot water tank, \$150. 881-0656
- ★ Antique brass bed, full size, w/rails, \$400. 881-8648
- ★ MTD tiller, rear tine, 5HP, \$500; Frigidaire refrigerator, 18', \$50. 586-7424
- ★ Travel tenders, Fisher Price w/bassinet, \$60; Graco, \$30; Century, \$35; rocking fish, \$12; rocking horses, \$10 ea. 586-2349
- ★ Stainless steel cable, new, 1/8-inch stranded, 250' spool, \$110. 931-433-5108
- ★ Persian rugs, two, high-quality, hand woven silk, 5x7, \$2,500 obo; 7x10, \$5,000 obo. 461-8314
- ★ Beanie babies, old, 50 each. 461-9662
- ★ Yamaha and Comet racing go-karts, \$750 ea.; Suzuki 230 4-wheeler, new tires. 830-5783
- ★ Men's Huffy mountain bike w/Gerry baby seat, \$80. 837-8003
- ★ Sun Mountain summit stand golf bag, red, used one year, \$85. 837-4409
- ★ GE, refrigerator, 15.6 cu. ft., \$75; Kenmore power-Miser 6, hot water heater, 40-gallon, 1 year old, \$75. 725-7995
- ★ Computer printer, HP 855C, Deskjet, \$25. 232-
- ★ V-hull boat, 14', trailer, trolling motor, depth finder, deep cycle battery, \$500. 880-2373
- ★ Nordic Trac Sequoa model ski simulator, \$200; Raleigh, 12-speed, super course model men's bike, \$150. 539-0263
- ★ Friedrich air conditioners, 6,500-14,000 BTU window and through-wall, still in boxes, never used 881-5093
- ★ Pickup truck bed liner for LWB pickup, \$75. 582-3422

Vehicles

- ★ Volvo 740, turbo, \$5,500. 881-8149
- ★ 1989 Ford Ranger XLT supercab, 2.9L, V-6, auto, 186K miles, bed liner, camper shell, \$2,600 obo. 931-433-8200
- ★ 1993 Ford Ranger XLT, V-6, 5-speed, 92K miles, \$6,800. 325-6000
- ★ 1985 Chevy Custom Deluxe truck, V-8, 350, lots of new parts, \$6,995. 650-1179 before 3 p.m.
- ★ 1994 Mercury Cougar, 108K miles, 4.6L, power locks/seats, moon-roof, leather, \$6,900. 287-2692
- ★ 1991 Cadillac Sedan Deville, 68K miles, power blue interior/exterior, \$6,000. 230-2586

- ★ 1997 Ford F-150, 4X4, 4.6, V-8, automatic, brush guard w/winch, white w/red interior, 51K miles, \$17,000 neg. 582-3664
- ★ 1979 Winnebago, 26', kitchen, bath, dining, Onan gen., roof a/c, 46K miles, 440 Dodge, \$7,500. 729-8020
- ★ 1973 Dodge, 1/2-ton, club cab pickup, needs transmission, \$600. 883-8947
- ★ 1987 Porsche 924S, 5-speed, 74K miles, \$5,600; 1977 Porsche 924, 4-speed, \$1,900. 828-6213
- ★ 1989 Ford Econoline van, \$2,200. 881-5093
- ★ 1996 Gulfstream Innsbruck travel trailer, 21', microwave, large refrigerator, \$8,900. 881-5093
- ★ 1999 Explorer Sport, white, CD, 2WD, automatic, 45K miles, warranty to 75K miles, \$19,000. 828-9861

Free

- ★ Gray and white kittens, five, 5-weeks old; one yellow tabby, 7-weeks. 772-9794
- ★ To good home, black lab mix dog, male, approx. 1-yr. old, all shots, neutered. 883-9339

Wanted

- ★ Modem for 75 MHz Pentium PC, 33K or 56K baud. 883-2757
- ★ Female roommate to share 3 br./2 ba. mobile home near Cracker Barrel on Wal-Triana. 772-9500

Center Announcements

- ★ AGA Meets The North Alabama Chapter of the Association of Government Accountants will hold its monthly meeting on April 20. The meeting will be at the Holiday Inn at Madison Square Mall. There will be a social hour at 5:30 p.m. and dinner at 6:15. Cost is \$15 per person. For reservations, call Sandy Seymour at 544-0099.
- MESA Meets The Marshall Engineers and Scientists Association (MESA) will meet at 11:30 a.m. April 20 in Bldg. 4471, room C-105. Refreshments will be served.
- Software of the Year Nominations Deadline to submit nominations for the annual Software of the Year Award is Friday. Competition guidance is available on the Web at: www.hq.nasa.gov/ office/codei/swy99win.html For more information, call James J. McGroary at 544-0013 or Abbie Johnson at 544-0014.
- Annual Retiree Dinner The 2000 Retirement Dinner has been scheduled for June 22 at the Von Braun Center.

- ★ MARS Ballroom Dance Club Rumba and samba lessons begin at 7 p.m. April 17 and 24 in the Parish Hall of St. Stephen's Episcopal Church at 8020 Whitesburg Dr. The lessons will be taught by Don Worrell and will cost \$6 per person per night. For more information, call Woody Bombara at 650-0200.
- Redstone Toastmasters Do you want to improve your speech? Visit and join Redstone Toastmasters, which meets weekly at 6 p.m. on Tuesday at Piccadilly Cafeteria in Madison Square Mall. For more information, call Sylvia Battle at 890-0547.
- ✓ Lunar Nooners Toastmasters The NASA
 Lunar Nooners Toastmasters Club meets Tuesday
 at 11:30 a.m. in Bldg. 4610 cafeteria conference
 room. All Marshall employees, contractors and
 friends are invited to attend.

Job Opportunities

Reassignment Bulletin 00-23-CP, AST, Data Systems, GS-854-13, Center Operations Directorate, Information Services Dept., Systems Engineering & Applications Group. Closes April

Reassignment Bulletin: 00-20-CP, AST, Technical Management, GS-801-14, Science Directorate, Microgravity Research Program Office. Closes April 25.

Reassignment Bulletin 00-19-CL, AST, Flight Vehicle Atmospheric Environment, GS-861-13, Engineering Directorate, Engineering Systems Dept., Environments Group. Closes April 25. CPP 00-61-CP, Office Automation Assistant, GS-326-7, Science Directorate, Space Optics, Manufacturing Technology Center. Closes April 19.

CPP 00-52-CP, Traffic Management Specialist, GS-2130-5. Center Operations Directorate, Logistics Services Dept., Transportation & Logistics Engineering. Group. Closes April 19. CPP 00-56-CP, Management Support Assistant (OA), GS-303-07 (3 vacancies). Science Directorate/Engineering Directorate. Closes April 19.

CPP 00-66-CP, Management Support Assistant (OA), GS-303-7. Procurement Office, Office of the Director. Closes April 19.

CPP 00-62-RE, AST, Aeorspace Flight Systems, GS-861-14, Space Transportation Directorate, Second Generation RLV Program Office. Closes April 18.

CPP 00-57-EB, AST, Optical Physics, GS-1310-14, Engineering Directorate, Avionics Dept., Instrumentation & Control Group. Closes April 18.

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